

October 24, 2017

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RETURN RECEIPT REQUESTED

Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-10459

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Director, Air Enforcement Division
Office of Civil Enforcement
U.S. EPA Headquarters, MC 2242A
1200 Pennsylvania Ave., NW
Washington, D.C. 20460

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RETURN RECEIPT REQUESTED

Chief, Air and TRI Section
Enforcement Division
U.S. Environmental Protection Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105

RE: Consent Decree No. CV-15-02206-PHX-DLR – Notification of Emission Limit Exceedance

To whom it may concern:

A Reference Test Method 5 particulate test was conducted on the RR Cottrell Electrostatic Precipitator (ESP) on Sept 19, 2017. Asarco received the results of the test on October 23, 2017. The summary of the test results is attached. The 3-run average was 26.09 mg/dscm, above the 23 mg/dscm provided for in the Consent Decree (Paragraph 19). As explained below, Asarco believes that the test results are erroneous because of the likelihood of sampling error and Asarco has scheduled a retest for the week of November 6, 2017.

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Prior Method 5 testing shows that the RR Cottrell's particulate averages about half the standard or less. The continuous opacity measurement on the RR Cottrell ESP was during the test periods normal (see attached). Such results ordinarily would not indicate the existence of a high particulate condition.

In an attempt to verify the performance test results Asarco requested that its testing contractor check their test parameters and calculations for this performance test. Asarco notes that this location is very difficult to sample as it is composed of a hundred year old 20' x 20' square brick flue, and it is very likely that sample error could have been introduced. It is worth noting in this regard that the RR Cottrell ESP will be replaced with a baghouse prior to May 1, 2018 according to Paragraph 13.

Asarco has also scheduled a retest for the week of November 6, 2017. The repeat testing will occur within the 365 days of the Effective Date as provided in Paragraph 19.

If there are any questions please contact Amy Veek at (520) 356-3296.

Joseph A. Wilhelm General Manager

Hayden Operations

JAW/rcg

Attachments

pc:

S. Gasser, w/o enc.

A. Veek, w/enc. SM Engineer, "

Summary of ASARCO LLC Hayden Operations Particulate/SO₂ & H₂SO₄/SO₃ Emission Data R & R Cottrell 09/19/17

		EPA Met	thod 6 SO ₂	EPA Method 5b Particulates			
Run	Time	ppmvd	lb/hr	gr/dscf	lb/hr	mg/dscm*	
10-PT/SO2	09:30-11:00	36.1	100.00	0.0115	27.38	26.316	
11-PT/SO2	11:52-13:25	83.0	267.41	0.0138	38.20	31.579	
12-PT/SO2	14:30-16:05	83.0	256.35	0.0089	23.62	20.366	
Mean		67.4	207.92	0.0114	29.73	26.09	

			od 8 H ₂ SO ₄	EPA Method 8 SO ₃		
Run	Time	ppmvd	lb/hr	ppmvd	lb/hr	
1-H2SO4/SO3	09:30-11:00	1.5	6.17	1.5	5.03	
11-H2SO4/SO3	11:52-13:25	2.2	10.89	2.2	8.90	
12-H2SO4/SO3	14:30-16:05	1.9	9.00	1.9	7.36	
Mean		1.9	8.69	1.9	7.10	

EPA Methods 1-4 Gas Stream Characteristics								
Run	Time	AWCFM	ADCFM	DSCFH	Ts °F	H ₂ O	CO ₂	O ₂
						%v	%	vd
10-PT/SO2	09:30-11:00	347,519.8	331,082.1	16,666,847.9	121.8	4.73	0.00	20.90
11-PT/SO2	11:52-13:25	421,303.7	397,500.0	19,377,542.3	140.8	5.65	0.00	20.90
12-PT/SO2	14:30-16:05	407,260.2	383,476.2	18,576,409.0	144.6	5.84	0.00	20.90
Mean		392,027.9	370,686.1	18,206,933.1	135.7	5.41	0.00	20.90

Example Calculation from Run 1-PT/SO₂:

*mg/dscm = 2,288.35*gr/dscf

= .00115*2288.35

= 26.316

Run #1 -	- 10-PT/SO	2		
date	time	of_unt	of	
9/19/201	17 09:30	PCT		3.353
	17 09:36	PCT		3.217
	17 09:42	PCT		3.11
	17 09:48	PCT		3.461
	17 09:54	PCT		3.268
	17 10:00	PCT		3.01
9/19/201		PCT		2.92
	17 10:12	PCT PCT		2.934
	17 10:18 17 10:24	PCT		2.963 2.896
	17 10.2 4 17 10:30	PCT		2.973
	17 10:36 17 10:36	PCT		2.986
	17 10:42	PCT		3.157
	17 10:48	PCT		3.359
	17 10:54	PCT		3.063
	17 11:00	PCT		3.145
Run #2 -	- 11-PT/SO2	2		
date	time	of_unt	of	
	17 11:5 4	PCT		3.063
	17 12:00	PCT		3.016
	17 12:06	PCT		3.248
	17 12:12	PCT		3.387
	17 12:18	PCT		3.873 4.722
	17 12:24 17 12:30	PCT PCT		3.691
	17 12.30 17 12:36	PCT		3.17
	17 12:30 17 12:42	PCT		3.317
	17 12: 42 17 12:48	PCT		3.48
	17 12:54	PCT		4.636
9/19/201	17 13:00	PCT		4.131
9/19/201	17. 13:06	PCT		3.414
9/19/201	17 13:12	PCT		3.046
	17 13:18	PCT		3.038
	17 13:24	PCT		3.723
9/19/201	17 13:30	PCT		3.99
	12-PT/SO2	_	. •	
date	time	of_unt	of	2.07
	17 14:30 17 14:36	PCT PCT		3.07 3.044
	17 14:30 17 14:42	PCT		3.043
9/19/201		PCT		3.163
	17 14:54	PCT		3.456
	17 15:00	PCT		3.621
	17 15:06	PCT		3.123
9/19/201	17 15:12	PCT ·		3.673
9/19/201	17 15:18	PCT		4.921
	17 15:24	PCT		4.294
	17 15:30	PCT		3.717
	17 15:36	PCT		4.099
	17 15:42	PCT		4.09
	17 15:48	PCT		4.85 4.174
	17 15:54 17 16:00	PCT PCT		3.647
	17 16:00 17 16:06	PCT		3.163
	11 10.00	1 01		0.100